

| L Number | Hits  | Search Text   | DB                 | Time stamp          |
|----------|-------|---|--------------------|---------------------|
| 1        | 0     | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 and (detect\$4 identif\$4) with fail\$4 and fail\$4 and transaction and (repair\$4 re\$construct\$4 recover\$4) not roll\$ adj back not re\$post\$4 and multiple with overlap\$4 with fail\$4 | USPAT;<br>EPO; JPO | 2004/06/07<br>11:45 |
| 2        | 0     | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and multiple with overlap\$4 with fail\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:45 |
| 3        | 0     | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and (plural\$4 multiple) with overlap\$4 with fail\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:46 |
| 4        | 0     | shared with nothing and recover\$4 same fail\$4 and (plural\$4 multiple) with overlap\$4 with fail\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:46 |
| 5        | 44    | shared with nothing and recover\$4 same fail\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:46 |
| 6        | 31    | shared with nothing and recover\$4 same fail\$4 and failures  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:46 |
| 7        | 54658 | shared with nothing and recover\$4 same fail\$4 and (multiple plural\$4) failures   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:47 |
| 8        | 7     | shared with nothing and recover\$4 same fail\$4 and (multiple plural\$4) adj failures   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:54 |
| 9        | 0     | shared with nothing and recover\$4 same fail\$4 and (multiple plural\$4) adj failures and concurrent\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:49 |
| 10       | 0     | shared with nothing and recover\$4 same fail\$4 and (multiple plural\$4) adj failures and (simultaneous\$4 concurrent\$4)   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:49 |
| 11       | 5     | shared with nothing and recover\$4 same fail\$4 and (multiple plural\$4) adj failures and (together "at the same time")   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:52 |
| 12       | 0     | shared adj nothing and recover\$4 same fail\$4 and (multiple plural\$4) adj failures and (overlap concurrent\$4)  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:53 |
| 13       | 44    | multiple with overlap\$4 with failure   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:53 |
| 14       | 0     | multiple with overlap\$4 with failure and shar\$4 adj nothing   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:53 |
| 15       | 0     | multiple with overlap\$4 with failure and shar\$4 with nothing  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:54 |
| 16       | 7     | shared with nothing and recover\$4 same fail\$4 and (multiple many group plural\$4) adj failures  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:55 |
| 17       | 7     | shared with nothing and recover\$4 and detect\$4 and (multiple many group plural\$4) adj failures   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:55 |
| 18       | 29    | shared with nothing and recover\$4 and detect\$4 and failures   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:55 |
| 19       | 25    | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as.   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:55 |
| 20       | 13    | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and simultaneous\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>11:56 |
| 21       | 12    | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and overlap\$5  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:56 |
| 22       | 0     | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 simultaneous\$4) with (detect\$4 recover\$4)  | USPAT;<br>EPO; JPO | 2004/06/07<br>11:56 |

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| 23 | 4  | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 simultaneous\$4) with failure  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:31 |
| 24 | 0  | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 simultaneous\$4) with detect\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:12 |
| 25 | 0  | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 simultaneous\$4) with recover\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:13 |
| 26 | 11 | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with recover\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:20 |
| 27 | 14 | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with detect\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:16 |
| 28 | 18 | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with fail\$4'  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:17 |
| 29 | 18 | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with fail\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:17 |
| 30 | 8  | (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with recover\$4) and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with detect\$4) and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 group multiple plural\$4 simultaneous\$4) with fail\$4') | USPAT;<br>EPO; JPO | 2004/06/07<br>12:14 |
| 32 | 11 | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with fail\$4'  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:17 |
| 33 | 11 | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with fail\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:17 |
| 34 | 4  | (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with detect\$4) and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with fail\$4') and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with fail\$4)                      | USPAT;<br>EPO; JPO | 2004/06/07<br>12:21 |

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| 36 | 0  | (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with detect\$4) and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with fail\$4') and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with recover\$4) | USPAT;<br>EPO; JPO | 2004/06/07<br>12:21 |
| 35 | 2  | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with recover\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:21 |
| 37 | 0  | (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with detect\$4) and (shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with recover\$4)   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:21 |
| 31 | 4  | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with detect\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:25 |
| 38 | 2  | shared with nothing and recover\$4 and detect\$4 and failures not (ibm "business machines").as. and (overlap\$5 multiple plural\$4 simultaneous\$4) with recover\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:26 |
| 39 | 0  | shared with nothing and recover\$4 with (overlap\$5 simultaneous\$4) with failure  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:31 |
| 40 | 0  | shared with nothing and recover\$4 with (overlap\$5 simultaneous\$4) with detect\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:31 |
| 41 | 8  | shared with nothing and recover\$4 with (overlap\$5 multiple group simultaneous\$4 simultaneous\$4) with detect\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:38 |
| 42 | 0  | shared with nothing and recover\$4 with (overlap\$5 multiple plural\$4 simultaneous\$4 simultaneous\$4) with detect\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:34 |
| 43 | 0  | shared with nothing and recover\$4 with (overlap\$5 multiple plural\$4 "same time" simultaneous\$4 simultaneous\$4) with detect\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:34 |
| 44 | 0  | shared with nothing and recover\$4 with (overlap\$5 multiple plural\$4 together simultaneous\$4 simultaneous\$4) with detect\$4  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:34 |
| 45 | 8  | shared with nothing and recover\$4 with (overlap\$5 multiple group "more than one" simultaneous\$4 simultaneous\$4) with detect\$4   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:38 |
| 46 | 20 | shared with nothing and recover\$4 with (overlap\$5 multiple group "more than one" simultaneous\$4 simultaneous\$4)  | USPAT;<br>EPO; JPO | 2004/06/07<br>12:56 |
| 47 | 20 | shared with nothing and recover\$4 with (overlap\$5 multiple group "more than one" simultaneous\$4 overlap\$5)   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:57 |
| 48 | 13 | shared with nothing and recover\$4 with (overlap\$5 multiple group "more than one" simultaneous\$4 overlap\$5) not (ibm "business machines").as.   | USPAT;<br>EPO; JPO | 2004/06/07<br>13:04 |
| 49 | 4  | shared with nothing and recover\$4 with (overlap\$5 multiple "more than one" simultaneous\$4 overlap\$5) not (ibm "business machines").as.   | USPAT;<br>EPO; JPO | 2004/06/07<br>12:59 |

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| 50 | 4   | shared with nothing and recover\$4 with (overlap\$5 multiple "more than one" simultaneous\$4 overlap\$5) not (ibm "business machines").as.                   | USPAT;<br>EPO; JPO              | 2004/06/07<br>13:04 |
| -  | 18  | 4665520.pn. 5140689.pn. 5319773.pn. 5319774.pn. 5434994.pn. 5748958.pn. 5805786.pn. 5884327.pn. 5920863.pn. 5926619.pn.                                      | USPAT;<br>EPO; JPO              | 2002/11/18<br>10:36 |
| -  | 16  | 4665520.pn. 5140689.pn. 5319773.pn. 5319774.pn. 5434994.pn. 5748958.pn. 5805786.pn. 5884327.pn. 5920863.pn. 5926619.pn. and shared adj nothing               | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:32 |
| -  | 0   | (4665520.pn. 5140689.pn. 5319773.pn. 5319774.pn. 5434994.pn. 5748958.pn. 5805786.pn. 5884327.pn. 5920863.pn. 5926619.pn.) and shared adj nothing             | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:10 |
| -  | 16  | 4665520.pn. 5140689.pn. 5319773.pn. 5319774.pn. 5434994.pn. 5748958.pn. 5805786.pn. 5884327.pn. 5920863.pn. 5926619.pn. and roll\$ adj back and re\$post\$   | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:43 |
| -  | 0   | (4665520.pn. 5140689.pn. 5319773.pn. 5319774.pn. 5434994.pn. 5748958.pn. 5805786.pn. 5884327.pn. 5920863.pn. 5926619.pn.) and roll\$ adj back and re\$post\$ | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:37 |
| -  | 2   | recover\$ near fail\$ and shared near distribu\$ and detect\$ and recover\$ and roll\$back   | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:59 |
| -  | 0   | recover\$ near fail\$ and shared near distribu\$ and detect\$ and recover\$ and roll\$back and re\$posting   | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:55 |
| -  | 0   | (without adj no) near roll\$back and re\$post  | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:57 |
| -  | 0   | (without no) near roll\$back and re\$post  | USPAT;<br>EPO; JPO              | 2002/04/22<br>14:58 |
| -  | 1   | shared adj nothing adj distributed   | USPAT;<br>EPO; JPO              | 2002/04/22<br>15:41 |
| -  | 1   | shar\$ adj nothing adj distrib\$   | USPAT;<br>EPO; JPO              | 2002/04/22<br>16:00 |
| -  | 8   | shar\$ near nothing near distrib\$   | USPAT;<br>EPO; JPO              | 2002/04/22<br>15:45 |
| -  | 133 | shar\$ adj nothing   | USPAT;<br>EPO; JPO              | 2002/04/22<br>16:00 |
| -  | 22  | shar\$ adj nothing and detect and fail\$ and recover\$ and distribu\$  | USPAT;<br>EPO; JPO              | 2003/05/07<br>11:07 |
| -  | 1   | 640412.pn.   | USPAT;<br>EPO; JPO              | 2002/04/30<br>14:43 |
| -  | 0   | 8640412.pn.  | USPAT;<br>EPO; JPO              | 2002/04/30<br>14:44 |
| -  | 0   | 8640412.pn.  | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2002/04/30<br>14:44 |
| -  | 1   | 640412.pn.   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2002/04/30<br>14:44 |
| -  | 129 | shared adj nothing   | USPAT;<br>EPO; JPO              | 2002/11/18<br>11:42 |
| -  | 110 | shared adj nothing and distribu\$4   | USPAT;<br>EPO; JPO              | 2002/11/18<br>10:37 |
| -  | 29  | shared adj nothing and distribu\$4 and recover\$4 same fail\$4   | USPAT;<br>EPO; JPO              | 2002/11/18<br>10:39 |
| -  | 0   | shared adj nothing and distribu\$4 and automatic\$4 same recover\$4 same fail\$4   | USPAT;<br>EPO; JPO              | 2002/11/18<br>10:38 |
| -  | 23  | shared adj nothing and distribu\$4 and recover\$4 same fail\$4 and automatic\$5  | USPAT;<br>EPO; JPO              | 2002/11/18<br>10:39 |
| -  | 8   | 707/\$.ccls. and shared adj nothing and distribu\$4 and recover\$4 same fail\$4 and automatic\$5   | USPAT;<br>EPO; JPO              | 2003/12/30<br>14:16 |

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| - | 3     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same failure  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:42 |
| - | 3     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4  | USPAT;<br>EPO; JPO | 2002/11/20<br>13:04 |
| - | 2     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4 and transaction same execut\$4                       | USPAT;<br>EPO; JPO | 2002/11/18<br>12:13 |
| - | 0     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4 and transaction same execut\$4 and roll\$4 same back | USPAT;<br>EPO; JPO | 2002/11/18<br>10:57 |
| - | 0     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4 and transaction same execut\$4 and roll\$4           | USPAT;<br>EPO; JPO | 2002/11/18<br>10:58 |
| - | 0     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4 and transaction same execut\$4 and roll\$6           | USPAT;<br>EPO; JPO | 2002/11/18<br>10:58 |
| - | 2     | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4 and transact\$4 same execut\$4                       | USPAT;<br>EPO; JPO | 2002/11/18<br>11:15 |
| - | 1     | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same fail\$4 and transact\$4 same execut\$4 and automatic\$4 same recover\$4       | USPAT;<br>EPO; JPO | 2002/11/18<br>11:25 |
| - | 85    | automatic\$4 same recover\$4 and automatic\$4 same execut\$ same completion   | USPAT;<br>EPO; JPO | 2002/11/18<br>11:26 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$ same completion and share\$4 adj nothing and distributed  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:41 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$ same completion and shared adj nothing and distributed  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:27 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$ same completion and shared adj nothing  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:27 |
| - | 0     | shared adj nothing and automatic\$4 same recover\$4 and automatic same execut\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:37 |
| - | 2     | shared adj nothing and automatic\$4 same recover\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>11:37 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$ same completion and share\$4 adj nothing  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:41 |
| - | 65    | shared adj nothing and automatic\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>11:42 |
| - | 0     | shared adj nothing and automatic\$4 near4 recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:42 |
| - | 0     | shared adj nothing and automatic\$4 near4 execut\$4 and automatic\$4 same recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>11:53 |
| - | 9     | shared adj nothing and automatic\$4 near4 execut\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:02 |
| - | 14328 | automatic\$4 same recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:13 |
| - | 1578  | automatic\$4 same recover\$4 and automatic\$4 same execut\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:15 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and shared adj nothing   | USPAT;<br>EPO; JPO | 2002/11/18<br>12:16 |
| - | 347   | automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and transaction  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:16 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and transaction and re\$post\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:17 |
| - | 0     | automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and re\$post\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:17 |

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|---|--------|--|--------------------|---------------------|
| - | 7      | automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and transaction and failure near recovery and detect near failure           | USPAT;<br>EPO; JPO | 2002/11/18<br>12:17 |
| - | 38     | automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and transaction and failure near recovery                                   | USPAT;<br>EPO; JPO | 2002/11/18<br>12:20 |
| - | 8      | 707/\$.ccls. and automatic\$4 same recover\$4 and automatic\$4 same execut\$4 and transaction and failure near recovery                  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:37 |
| - | 182    | transaction near recovery  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:29 |
| - | 9537   | transaction near recovery nad automatic\$4 near4 recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:30 |
| - | 182    | transaction near recovery and automatic\$4 near4 recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:30 |
| - | 13     | transaction near recovery and automatic\$4 near4 recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:30 |
| - | 1      | transaction near recovery and automatic\$4 near4 recover\$4 and automatic near4 execut\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:31 |
| - | 2      | transaction near recovery and automatic\$4 near4 recover\$4 and automatic\$4 near4 execut\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>12:31 |
| - | 1893   | transaction same recovery  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:37 |
| - | 168    | transaction same recovery and automatic\$4 near4 recover\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>12:38 |
| - | 22     | transaction same recovery and automatic\$4 near4 recover\$4 and automatic\$4 near4 execut\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>12:39 |
| - | 0      | transaction same recovery and automatic\$4 near4 recover\$4 and automatic\$4 near4 execut\$4 and re\$post\$4                             | USPAT;<br>EPO; JPO | 2002/11/18<br>12:39 |
| - | 4      | 707/\$.ccls. and transaction same recovery and automatic\$4 near4 recover\$4 and automatic\$4 near4 execut\$4                            | USPAT;<br>EPO; JPO | 2002/11/18<br>13:51 |
| - | 4      | 707/\$.ccls. and transaction same recovery and automatic\$4 near4 recover\$4 and automatic\$4 near4 execut\$4 and failure near4 recovery | USPAT;<br>EPO; JPO | 2002/11/18<br>12:41 |
| - | 616995 | shared adj nothing and auto\$9near4 execut\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>13:00 |
| - | 0      | shared adj nothing and automatic\$4 near4 execut\$4 and auto\$ near4 recover\$3  | USPAT;<br>EPO; JPO | 2002/11/18<br>13:06 |
| - | 9      | shared adj nothing and auto\$9 near4 execut\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:09 |
| - | 84     | shared adj nothing and transaction   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:33 |
| - | 6      | shared adj nothing and transaction near recovery   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:10 |
| - | 1      | shared adj nothing and transaction near recovery and automatic   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:10 |
| - | 4      | shared adj nothing and transaction near recovery and automatic\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>13:11 |
| - | 0      | shared adj nothing and transaction near4 recover\$3 and automatic\$4 near recover\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:11 |
| - | 7      | shared adj nothing and transaction near4 recover\$3 and automatic\$4 and execut\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:12 |
| - | 8      | shared adj nothing and transaction and automat\$7 near4 execut\$4  | USPAT;<br>EPO; JPO | 2002/11/18<br>13:52 |
| - | 0      | shared adj nothing and transaction and automat\$7 near4 execut\$4 and automatic\$4 near4 recover\$4                                      | USPAT;<br>EPO; JPO | 2002/11/18<br>13:40 |
| - | 0      | shared adj nothing and transaction and automat\$7 near4 recover\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:40 |
| - | 0      | shared adj nothing and automat\$7 near4 recover\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:40 |
| - | 110    | automatic\$4 near recover\$4 and distributed and transaction   | USPAT;<br>EPO; JPO | 2002/11/18<br>13:53 |

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|---|------|--|--------------------|---------------------|
| - | 60   | automatic\$4 near recover\$4 and distributed and transaction and failure near4 recovery  | USPAT;<br>EPO; JPO | 2002/11/18<br>13:53 |
| - | 0    | automatic\$4 near recover\$4 and distributed and transaction and failure near4 recovery and shared near nothing                            | USPAT;<br>EPO; JPO | 2002/11/18<br>13:54 |
| - | 4    | shared adj nothing.ti.   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:07 |
| - | 2    | shared adj nothing.ti. and recovery  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:08 |
| - | 0    | shared adj nothing.ti. and recover544 near4 failure  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:08 |
| - | 2    | shared adj nothing.ti. and recover\$4 near4 failure  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:08 |
| - | 0    | 7recovery near4 failure.ti.  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:24 |
| - | 134  | recovery near4 failure.ti.   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:24 |
| - | 1    | recovery near4 failure.ti. and shared adj nothing  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:24 |
| - | 12   | shared adj nothing and transaction and detect\$4 near4 failure   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:27 |
| - | 5    | shared adj nothing and transaction and detect\$4 near4 failure and recover same failure  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:28 |
| - | 2    | shared adj nothing and transaction and detect\$4 near4 failure and recover same failure and roll\$back                                     | USPAT;<br>EPO; JPO | 2002/11/20<br>11:25 |
| - | 129  | shared adj nothing   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:33 |
| - | 21   | shared adj nothing and failure same recovery   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:33 |
| - | 0    | shared adj nothing and failure same recovery and failure same detect and distributed same transaction                                      | USPAT;<br>EPO; JPO | 2002/11/18<br>14:34 |
| - | 2    | shared adj nothing and failure same recovery and failure same detect and distributed adj system  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:34 |
| - | 7    | shared adj nothing and failure same recovery and failure same detect   | USPAT;<br>EPO; JPO | 2002/11/18<br>14:37 |
| - | 7    | shared adj nothing and failure same recovery and failure same detect and recover\$4 near4 failure  | USPAT;<br>EPO; JPO | 2002/11/18<br>14:37 |
| - | 13   | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same failure                                | USPAT;<br>EPO; JPO | 2002/11/18<br>14:43 |
| - | 8    | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same failure and transaction                | USPAT;<br>EPO; JPO | 2002/11/18<br>14:50 |
| - | 1    | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 and detect\$4 same failure and transaction and roll\$back | USPAT;<br>EPO; JPO | 2002/11/18<br>15:15 |
| - | 7    | shared same nothing same distributed same transaction same system  | USPAT;<br>EPO; JPO | 2002/11/18<br>15:16 |
| - | 5    | shared same nothing same distributed same transaction same system and recover\$4   | USPAT;<br>EPO; JPO | 2002/11/18<br>15:16 |
| - | 4    | shared same nothing same distributed same transaction same system and recover\$4 same failure  | USPAT;<br>EPO; JPO | 2002/11/18<br>15:17 |
| - | 3    | shared same nothing same distributed same transaction same system and recover\$4 same failure and detect\$4                                | USPAT;<br>EPO; JPO | 2002/11/18<br>15:17 |
| - | 3    | shared same nothing same distributed same transaction same system and recover\$4 same failure and detect\$4 same failure                   | USPAT;<br>EPO; JPO | 2002/11/18<br>15:17 |
| - | 1431 | detect\$4 near fail\$4.ti.   | USPAT;<br>EPO; JPO | 2002/11/20<br>10:42 |
| - | 2    | 707/\$.ccls. and detect\$4 near fail\$4.ti.  | USPAT;<br>EPO; JPO | 2002/11/20<br>10:40 |

|   |     |  |                                |                     |
|---|-----|--|--------------------------------|---------------------|
| - | 0   | recover\$4 same fail\$4.ti.  | USPAT;<br>EPO; JPO             | 2002/11/20<br>10:42 |
| - | 180 | recover\$4 same fail\$4.ti.  | USPAT;<br>EPO; JPO             | 2002/11/20<br>10:43 |
| - | 1   | recover\$4 same fail\$4.ti. and shared adj<br>nothing  | USPAT;<br>EPO; JPO             | 2002/11/20<br>10:44 |
| - | 3   | recover\$4 same fail\$4.ab. and shared adj<br>nothing  | USPAT;<br>EPO; JPO             | 2002/11/20<br>11:46 |
| - | 2   | shared adj nothing and transaction and<br>detect\$4 near\$4 failure and recover same<br>failure and roll\$back and event same<br>recover | USPAT;<br>EPO; JPO             | 2002/11/20<br>11:26 |
| - | 0   | recover\$4 same fail\$4.ab. and shared adj<br>nothing and means adj for same detect\$4<br>and means adj for same recover\$4              | USPAT;<br>EPO; JPO             | 2002/11/20<br>11:48 |
| - | 0   | recover\$4 same fail\$4.ab. and shared adj<br>nothing and means same detect\$4 and means<br>same recover\$4                              | USPAT;<br>EPO; JPO             | 2002/11/20<br>11:48 |
| - | 3   | 5926619.pn. 5748958.pn. 5805786.pn.  | USPAT;<br>EPO; JPO             | 2002/11/20<br>13:04 |
| - | 0   | (5926619.pn. 5748958.pn. 5805786.pn.) and<br>shared adj nothing  | USPAT;<br>EPO; JPO             | 2002/11/20<br>13:05 |
| - | 0   | (5926619.pn. 5748958.pn. 5805786.pn.) and<br>coordinat\$4 and surviv\$4  | USPAT;<br>EPO; JPO             | 2002/11/20<br>13:05 |
| - | 0   | (5926619.pn. 5748958.pn. 5805786.pn.)<br>and surviv\$4 and coordinat\$   | USPAT;<br>EPO; JPO             | 2002/11/20<br>13:05 |
| - | 2   | (5926619.pn. 5748958.pn. 5805786.pn.)<br>and surviv\$4   | USPAT;<br>EPO; JPO             | 2002/11/20<br>13:05 |
| - | 164 | synchronous with transaction with system   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:05 |
| - | 6   | synchronous with transaction with system<br>and failure with recovery  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:08 |
| - | 0   | synchronous with transaction with system<br>and failure with recovery and shared adj<br>nothig   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:06 |
| - | 0   | synchronous with transaction with system<br>and failure with recovery and shar\$4 adj<br>nothig  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:06 |
| - | 0   | synchronous with transaction with system<br>and failure with recovery and shar\$4 with<br>nothig   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:07 |
| - | 0   | synchronous with transaction with system<br>and failure with recovery and shar\$4 adj<br>nothing   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:09 |
| - | 2   | synchronous and transaction with system<br>and failure with recovery and shar\$4 adj<br>nothing  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:19 |
| - | 2   | synchronous and transaction with system<br>and failure with recovery and shar\$4 adj<br>nothing and distributed                          | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:15 |
| - | 0   | synchronous adj transaction adj system<br>and failure with recovery and shar\$4 adj<br>nothing   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:19 |
| - | 2   | synchronous adj transaction adj system   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:21 |
| - | 12  | synchronous adj transaction and<br>transaction adj system  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:21 |
| - | 10  | synchronous adj transaction and<br>transaction adj system and recover\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>12:44 |
| - | 2   | synchronous adj transaction and<br>transaction adj system and recover\$4 with<br>failure   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:21 |
| - | 0   | synchronous adj transaction and<br>transaction adj system and recover\$4 and<br>share\$4 adj nothing and distributed                     | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:24 |



|   |        |   |                                |                     |
|---|--------|---|--------------------------------|---------------------|
| - | 0      | synchronous adj transaction and transaction adj system and recover\$4 and share\$4 adj nothing  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:25 |
| - | 2      | synchronous adj transaction and transaction adj system and recover\$4 and distributed   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>11:25 |
| - | 0      | synchronous adj transaction and transaction adj system and recover\$4 and share\$4 adj nothing  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>12:44 |
| - | 8      | synchronous and transaction and system and recover\$4 and share\$4 adj nothing  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>12:45 |
| - | 4      | synchronous and transaction and system and recover\$4 and share\$4 adj nothing and distributed and failure                                      | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>12:45 |
| - | 4      | synchronous and transaction and system and recover\$4 and share\$4 adj nothing and distributed and failure and recover\$4                       | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>12:46 |
| - | 5      | synchronous and transaction and system and recover\$4 and share\$4 adj nothing and distributed  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:17 |
| - | 0      | transaciton and synchronous adj replicat\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:17 |
| - | 13     | transaction and synchronous adj replicat\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:17 |
| - | 12     | transaction and synchronous adj replicat\$4 not "international business".as.  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:18 |
| - | 4      | transaction and synchronous adj replicat\$4 not "international business".as. and recover\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:18 |
| - | 4      | transaction and synchronous adj replicat\$4 not "international business".as. and recover\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:18 |
| - | 2      | transaction and synchronous adj replicat\$4 not "international business".as. and recover\$4 and failure   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:18 |
| - | 3      | transaction and synchronous adj replicat\$4 not "international business".as. and recover\$4 and fail\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:19 |
| - | 0      | transaction and synchronous adj replicat\$4 not "international business".as. and recover\$4 and fail\$4 and distributed and shar\$4 adj nothing | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:19 |
| - | 3      | transaction and synchronous adj replicat\$4 not "international business".as. and recover\$4 and fail\$4 and distributed                         | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:25 |
| - | 5      | synchronous adj replicat\$4 not "international business".as. and recover\$4 and fail\$4 and distributed   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:26 |
| - | 153    | shared adj nothing  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:26 |
| - | 1      | shared adj nothing and synchronous with (replication recover\$4)  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:29 |
| - | 4      | shared adj nothing and synchronous and distributed and recover\$4 and fail\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:32 |
| - | 7      | shared adj nothing and synchronous and recover\$4 and fail\$4   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:34 |
| - | 645797 | synchronous and transaction (recover\$4 replicat\$4 updat\$4)   | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:35 |
| - | 938    | synchronous and transaction with (recover\$4 replicat\$4 updat\$4)  | USPAT;<br>EPO; JPO;<br>IBM_TDB | 2003/05/07<br>13:35 |

|   |    |   |                                |                     |
|---|----|---|--------------------------------|---------------------|
| - | 2  | synchronous and transaction with (recover\$4 replicat\$4 updat\$4) and shared adj nothing   | USPAT;<br>EPO; JPO;<br>IBM TDB | 2003/05/07<br>13:36 |
| - | 0  | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 with recover\$4                               | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:16 |
| - | 0  | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 with recover\$4  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:36 |
| - | 2  | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4                               | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:17 |
| - | 2  | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4 and roll\$back                | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:17 |
| - | 0  | 707/\$.ccls. and shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4 and roll\$back with "without" | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:17 |
| - | 0  | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4 and roll\$back with "without"                  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:18 |
| - | 3  | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4 and roll\$back                                 | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:21 |
| - | 4  | shared adj nothing and recover\$4 same fail\$4 and automatic\$5 same recover\$4 and roll\$back  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:22 |
| - | 0  | shared adj nothing and recover\$4 same fail\$4 and automatic\$5 same recover\$4 and roll\$back and re\$post\$4                                  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:23 |
| - | 4  | shared adj nothing and recover\$4 with fail\$4 and automatic\$5 same recover\$4 and roll\$back  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:25 |
| - | 0  | roll\$back and re\$post\$4  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:26 |
| - | 63 | roll\$back and (re\$post\$4 re\$send\$4)  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:26 |
| - | 8  | roll\$back with transaction and (re\$post\$4 re\$send\$4) with transaction  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:27 |
| - | 5  | roll\$back with transaction and (re\$post\$4 re\$send\$4) with transaction and recover\$4   | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:27 |
| - | 4  | roll\$back with transaction and (re\$post\$4 re\$send\$4) with transaction and recover\$4 with fail\$4  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:27 |
| - | 2  | roll\$back with transaction and (re\$post\$4 re\$send\$4) with transaction and recover\$4 with fail\$4 and detect\$4                            | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:28 |
| - | 4  | shared adj nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:36 |
| - | 4  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and automatic\$5 same recover\$4   | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:36 |
| - | 5  | shared with nothing and recover\$4 same fail\$4 and automatic\$5 same recover\$4  | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:36 |
| - | 1  | shared with nothing and recover\$4 same fail\$4 and automatic\$5 same recover\$4 not roll\$back\$4 not re\$post\$4                              | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:40 |
| - | 0  | shared with nothing and recover\$4 same fail\$4 and automatic\$5 with recover\$4 not roll\$back\$4 not re\$post\$4                              | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:39 |
| - | 0  | shared with nothing and recover\$4 same fail\$4 and automatic\$5 with recover\$4 not roll\$back\$4 not re\$post\$4 and transaction              | USPAT;<br>EPO; JPO             | 2003/12/30<br>14:40 |
| - | 1  | shared with nothing and recover\$4 same fail\$4 and automatic\$5 same recover\$4 not roll\$back\$4 not re\$post\$4 and transaction              | USPAT;<br>EPO; JPO             | 2003/12/31<br>09:13 |

|   |    |   |                    |                     |
|---|----|---|--------------------|---------------------|
| - | 20 | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:27 |
| - | 12 | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction with (execut\$4 recover\$4)   | USPAT;<br>EPO; JPO | 2003/12/30<br>14:44 |
| - | 0  | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction with (execut\$4 recover\$4) and automatic\$4 same recover\$4  | USPAT;<br>EPO; JPO | 2003/12/30<br>14:45 |
| - | 8  | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction with (execut\$4 recover\$4) and automatic\$4  | USPAT;<br>EPO; JPO | 2003/12/30<br>14:47 |
| - | 8  | shared with nothing and recover\$4 same fail\$4 and transaction with (execut\$4 recover\$4) and automatic\$4 not roll\$back\$4 not re\$post\$4  | USPAT;<br>EPO; JPO | 2003/12/30<br>14:48 |
| - | 6  | shared with nothing and recover\$4 same fail\$4 and transaction with (execut\$4 recover\$4) and automatic\$4 not roll\$ adj back not re\$post\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>10:12 |
| - | 6  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (execut\$4 recover\$4) and automatic\$4 not roll\$ adj back not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>10:13 |
| - | 0  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (execut\$4 recover\$4) and automatic\$4 with recover\$4 not roll\$ adj back not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>10:13 |
| - | 1  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (execut\$4 recover\$4) and automatic\$4 with fail\$4 not roll\$ adj back not re\$post\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>10:16 |
| - | 0  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (recover\$4) and automatic\$4 with fail\$4 not roll\$ adj back not re\$post\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>10:17 |
| - | 2  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 not roll\$ adj back not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>10:22 |
| - | 0  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 with (detect\$4 identif\$4) not roll\$ adj back not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>10:22 |
| - | 0  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 with (detect\$4 identif\$4) not roll\$ adj back not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>10:23 |
| - | 2  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 and (detect\$4 identif\$4) with fail\$4 not roll\$ adj back not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>10:28 |
| - | 2  | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 and (detect\$4 identif\$4) with fail\$4 and fail\$4 and transaction and (repair\$4 re\$construct\$4 recover\$4) not roll\$ adj back not re\$post\$4 | USPAT;<br>EPO; JPO | 2004/06/07<br>11:44 |

|   |      |  |                    |                     |
|---|------|--|--------------------|---------------------|
| - | 1    | shared with nothing and distribut\$4 and recover\$4 same fail\$4 and transaction with (repair\$4 re\$construct\$4 recover\$4) and automatic\$4 with fail\$4 and (detect\$4 identif\$4) with fail\$4 and fail\$4 and transaction and (repair\$4 re\$construct\$4 recover\$4) and execut\$4 with transaction not roll\$ adj back not re\$post\$4 | USPAT;<br>EPO; JPO | 2003/12/31<br>10:34 |
| - | 1    | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous with transaction   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:30 |
| - | 0    | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous with transaction with system   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:28 |
| - | 2    | shared with nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:31 |
| - | 0    | shared adj nothing and recover\$4 same fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous with transaction  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:30 |
| - | 1    | shared with nothing and recover\$4 and fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous with transaction  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:32 |
| - | 6    | shared with nothing and recover\$4 and fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:33 |
| - | 5    | shared adj nothing and recover\$4 and fail\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:34 |
| - | 5    | shared adj nothing and recover\$4 not roll\$back\$4 not re\$post\$4 and transaction and synchronous  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:35 |
| - | 10   | shared adj nothing not roll\$back\$4 not re\$post\$4 and transaction and synchronous   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:39 |
| - | 0    | shared adj nothing not roll\$back\$4 not re\$post\$4 and transaction with synchronous  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:39 |
| - | 2    | shared adj nothing not roll\$back\$4 not re\$post\$4 and transaction same synchronous  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:39 |
| - | 22   | synchronous adj transaction with system  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:39 |
| - | 0    | synchronous adj transaction with system and shared adj nothing   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:40 |
| - | 13   | synchronous adj transaction with system not shar\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:40 |
| - | 8    | synchronous adj transaction with system not shar\$4 and fail\$4 and recover\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:41 |
| - | 0    | synchronous adj transaction with system not shar\$4 and fail\$4 and recover\$4 and node  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:40 |
| - | 0    | synchronous adj transaction with system not shar\$4 and fail\$4 and recover\$4 and node  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:41 |
| - | 1    | synchronous adj transaction with system not shar\$4 and fail\$4 and recover\$4 and distribut\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:42 |
| - | 2002 | synchronous with distribut\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:42 |
| - | 579  | synchronous with distribut\$4 with system  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:42 |
| - | 10   | synchronous with distribut\$4 with system with transaction   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:42 |
| - | 0    | synchronous with distribut\$4 with system with transaction and shared adj nothing  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:42 |
| - | 7    | synchronous with distribut\$4 with system with transaction not shared  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:43 |

|   |     |  |                    |                     |
|---|-----|--|--------------------|---------------------|
| - | 7   | synchronous with distribut\$4 with system with transaction not shared not roll\$back\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:43 |
| - | 7   | synchronous with distribut\$4 with system with transaction not shared not roll\$ adj back\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:43 |
| - | 7   | synchronous with distribut\$4 with system with transaction not shared not roll\$ adj back\$4 not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:45 |
| - | 1   | synchronous with distribut\$4 with system with transaction not shared not roll\$ adj back\$4 not re\$post\$4 and node  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:44 |
| - | 3   | synchronous with distribut\$4 with system with transaction and recover\$4 not shared not roll\$ adj back\$4 not re\$post\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:46 |
| - | 449 | synchronous and distribut\$4 with system and transaction and recover\$4 not shared not roll\$ adj back\$4 not re\$post\$4  | USPAT;<br>EPO; JPO | 2003/12/31<br>14:47 |
| - | 109 | synchronous and distribut\$4 with system and transaction and recover\$4 with fail\$4 not shared not roll\$ adj back\$4 not re\$post\$4   | USPAT;<br>EPO; JPO | 2003/12/31<br>14:47 |
| - | 4   | 707/202.ccls. and synchronous and distribut\$4 with system and transaction and recover\$4 with fail\$4 not shared not roll\$ adj back\$4 not re\$post\$4                                 | USPAT;<br>EPO; JPO | 2003/12/31<br>15:07 |
| - | 0   | 707/202.ccls. and synchronous and distribut\$4 with system and transaction and recover\$4 with fail\$4 not shared not roll\$ adj back\$4 not re\$post\$4 and recover\$4 with synchronous | USPAT;<br>EPO; JPO | 2003/12/31<br>15:08 |
| - | 1   | 707/202.ccls. and synchronous and distribut\$4 with system and transaction and recover\$4 with fail\$4 not shared not roll\$ adj back\$4 not re\$post\$4 and recover\$4 same synchronous | USPAT;<br>EPO; JPO | 2003/12/31<br>15:08 |